In the claims:

Please amend claim <u>8</u> to read as follows:

1. (Previously Amended) A gamma correction circuit, comprising:

a plurality of gamma correction lookup tables corresponding to a plurality of gamma values, wherein each of the plurality of lookup tables provides a set of output data in response to received input data; and

a gamma table selector that receives the set of output data and automatically selects the set of output data corresponding to one of the plurality of lookup tables, wherein the automatic selection of the set of output data is based on gamma selection information.

2. (Original) The gamma correction circuit of claim 1, wherein the plurality of gamma correction lookup tables includes a pass through function, wherein the pass through function provides the received input data as the set of output data.

3. (Original) The gamma correction circuit of claim 1, wherein each of the plurality of gamma correction tables stores a plurality of sets of output data, wherein each of the plurality of sets of output data corresponds to a gamma correction curve for a corresponding gamma value of the plurality of gamma values, wherein the gamma correction curve maps values of the received input data to output values on the gamma correction curve.

4. (Original) The gamma correction circuit of claim 3, wherein a set of pixel data is provided as the received input data to each of the gamma correction tables, and wherein the gamma table selector further comprises a multiplexor that receives the sets of output data from the plurality of gamma correction lookup tables, wherein the multiplexor

selects a selected set of output data from the sets of output data based on the gamma selection information.

5. (Original) The gamma correction circuit of claim 4, wherein the gamma correction tables are memory structures addressed by the received input data.

6. (Amended) A gamma correction block, comprising:

a gamma correction lookup table, wherein the gamma correction lookup table stores gamma correction data corresponding to a plurality of gamma correction curves, wherein the gamma correction lookup table provides a plurality of sets of gamma corrected data in response to a set of input data, wherein the plurality of sets of gamma corrected data includes a set of gamma corrected data for each of the plurality of gamma correction curves; and

a selection block operably coupled to the gamma correction lookup table, such that the selection block automatically receives the plurality of sets of gamma corrected data and selects a selected set of gamma corrected data from the plurality of sets of gamma corrected data based on a gamma selection information.

7. (Cancelled)

8. (Amended 5/6/03) A gamma correction circuit comprising:

a lookup table that stores gamma corrected data corresponding to a plurality of gamma correction curves, wherein the lookup table receives input signals that select a plurality of gamma corrected data sets from the lookup table, wherein a first portion of the input signals select a portion of the plurality of gamma correction curves, and wherein a second portion of the input signals selects the plurality of gamma corrected data sets from the portion of the plurality of gamma correction curves;

a selection block operably coupled to the lookup table, wherein the selection block receives <u>at least one</u> selection signals and the plurality of gamma corrected data sets and selects a selected data set from the plurality of gamma corrected data sets.

9. (Previously Amended) A gamma correction circuit comprising:

means for storing a plurality of gamma corrected data sets corresponding to a plurality of gamma correction curves, wherein the plurality of gamma corrected data sets are precomputed; and

means for selecting a gamma corrected data set based on curve information, wherein the means for selecting is operably coupled to the means for storing such that means for storing provides the plurality of gamma corrected data sets to the means for selecting, such that the means for selecting selects a selected curve from the plurality of gamma correction curves and position information that selects the gamma corrected data set at a corresponding position on the selected curve.

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Previously Added) A video graphics circuit comprising:

a frame buffer, wherein the frame buffers stores display information;

a gamma correction block operably coupled to the frame buffer wherein the gamma
correction block stores a plurality of sets of precomputed gamma corrected data
corresponding to a plurality of gamma correction curves, wherein the gamma
correction block receives the display information and gamma selection
information, wherein the gamma correction block provides gamma corrected data
in response to the display information from a gamma correction curve selected by
the gamma selection information; and

a digital to analog converter operably coupled to the gamma correction block, wherein
the digital to analog converter receives the gamma corrected data and generates an
analog display signal.

21. (Previously Added) A video graphics circuit comprising:

a frame buffer, wherein the frame buffers stores display information;

a gamma correction block operably coupled to the frame buffer wherein the gamma
correction block stores a plurality of sets of precomputed gamma corrected data
corresponding to a plurality of gamma correction curves, wherein the gamma

correction block receives the display information and gamma selection information, wherein the gamma correction block provides gamma corrected data in response to the display information from a gamma correction curve selected by the gamma selection information; and

a video graphics processor operably coupled to the frame buffer, wherein the video graphics processor generates at least a portion of the display information stored in the frame buffer.

22. (Previously Added) A method for gamma correction in a video graphics system, comprising:

receiving pixel information;

selecting a set of gamma corrected data from a plurality of sets of precomputed gamma corrected data based on the pixel information and gamma selection information, wherein the plurality of sets of precomputed gamma corrected data include gamma corrected data corresponding to a plurality of gamma correction curves; and

converting the set of gamma corrected data from a digital format to a portion of an analog display signal.